I CLAIM AS MY INVENTION:

1. A control device to optimize load image generation in an electrophotographic process, comprising:

a light-sensitive and temperature-sensitive photoconductor layer for pixel-by-pixel exposure with a temperature-sensitive light source;

the photoconductor layer being more sensitive with rising temperature, such that given a predetermined quantity of light and predetermined charge it discharges deeper;

the light source emitting a lesser luminous power with rising temperature given a same actuation power;

a respective temperature compensation for the light source and for the photoconductor layer;

the temperature compensation for the photoconductor layer being at least one of adapting current flowing through the light source and adapting exposure time of the light source;

the temperature compensation for the light source being at least one of correction of the current flowing through the light source and a change of the exposure time;

for the temperature compensation of the photoconductor layer a measurement event which measures a discharge depth of the photoconductor layer given predetermined luminous duration and predetermined current through the light source; and

a temperature of the light source measured in the course of the measurement event being used as a reference value for the temperature compensation of the light source.

2. The control device according to claim 1 wherein during the adapting of the exposure time of the light source, dependent on the discharge depth a temperature of the light source measured during the measurement event is used as a reference value for the temperature-dependent current regulation.

3. The control device according to claim 1 wherein for discharge depth regulation the discharge depth is measured at least one of cyclically, permanently, and as needed, given predetermined temperature variations from a desire value, and is readjusted given variation of a desired quantity over change of the radiated luminous power of the light source.

4. The control device according to claim 1 wherein light energy of the light source is held constant between successive discharge depth measurements.

5. The control device according to claim 4 wherein the temperature-dependent regulation of the light source occurs via the current flowing through the light source, whereby in a calculating unit, as a function of a variation of the reference temperature, a correction therm is introduced that

effects a predetermined light energy change, the correction therm being discontinued when the measurement of the discharge depth occurs.

6. The control device according to claim 1 designed such that in an operating phase of lesser temperature than a nominal temperature T_{limit}, a temperature overcompensation occurs for the light source such that the activation power is dynamically superproportionally raised.

7. The control device according to claim 6 wherein a trigger voltage for the luminous power occurs according to a formula

$$V_{I\ LED} = V_{base} + V_{corr}(T_{REF}-T_{current}) + V_{corr}(T_{limit}-MIN(T_{limit};T_{current}))$$

where

$V_{I\ LED}$ = control voltage
V_{base} = base voltage
V_{corr} = temperature coefficient for the luminous power stabilization
T_{REF} = current reference temperature
$T_{current}$ = current measured temperature
T_{limit} = boundary temperature in which the dynamic superproportional luminous power increase ends.

8. The control device of claim 1 wherein the control device is a printing device control device.

9. The control device of claim 8 wherein the light source comprises at least one of a light-emitting diode comb and a semiconductor laser arrangement.

10. A method for optimizing load image generation in an electrophotographic process, comprising the steps of:

providing a light-sensitive and temperature-sensitive photoconductor layer for exposure pixel-by-pixel with a temperature-sensitive light source;

the photoconductor layer becoming more sensitive with rising temperature such that given a predetermined quantity of light and predetermined charge it discharges deeper;

the light source emitting a lesser luminous power with rising temperature given a same actuation power;

providing a respective temperature compensation for the light source and for the photoconductor layer;

providing the temperature compensation for the photoconductor layer by at least one of adapting current flowing through the light source and adapting exposure time of the light source;

providing the temperature compensation for the light source by at least one of correction of current flowing through the light source and change of exposure time;

for the temperature compensation of the photoconductor layer, providing a measurement event in which a discharge depth of the photoconductor layer is predetermined given predetermined luminous duration and predetermined current through the light source; and

using a temperature of the light source measured in the course of the measurement event as a reference value for the temperature compensation of the light source.

11. The method according to claim 10 wherein during the adjustment of the exposure time of the light source dependent on the discharge depth, a temperature of the light source measured during the measurement event is used as a reference value for the temperature-dependent current regulation.

12. The method according to claim 10 wherein in an operating phase of lesser temperature than a nominal temperature T_{limit}, a temperature over-compensation occurs for the light source such that the activation power is dynamically increased until the nominal temperature is reached.

13. The method according to claim 10 wherein in an operating phase of lesser temperature than a nominal temperature $T_{limit,}$ a temperature over-compensation occurs for the light source such that the activation power is dynamically increased superproportionally.

14. A control device to optimize load image generation in an electrophotographic process, comprising:

a light-sensitive and temperature-sensitive photoconductor layer for exposure with a temperature-sensitive light source;

the photoconductor layer being more sensitive with rising temperature, such that given a predetermined quantity of light and predetermined charge it discharges deeper with rising temperature;

the light source emitting a lesser luminous power with rising temperature given a same actuation power;

a respective temperature compensation for the light source and for the photoconductor layer;

the temperature compensation for the photoconductor layer being at least one of adapting current flowing through the light source and adapting exposure time of the light source;

the temperature compensation for the light source being at least one of correction of the current flowing through the light source and a change of the exposure time;

for the temperature compensation of the photoconductor layer a measurement event which measures a discharge depth of the photoconductor layer; and

a temperature of the light source being used as a reference value for the temperature compensation of the light source.

15. A method for optimizing load image generation in an electrophotographic process, comprising the steps of:

providing a light-sensitive and temperature-sensitive photoconductor layer for exposure with a temperature-sensitive light source;

the photoconductor layer becoming more sensitive with rising temperature such that given a predetermined quantity of light and predetermined charge it discharges deeper with rising temperature;

the light source emitting a lesser luminous power with rising temperature;

providing a respective temperature compensation for the light source and for the photoconductor layer;

providing the temperature compensation for the photoconductor layer by at least one of adapting current flowing through the light source and adapting exposure time of the light source;

providing the temperature compensation for the light source by at least one of correction of current flowing through the light source and change of exposure time;

for the temperature compensation of the photoconductor layer, providing a measurement event in which a discharge depth of the photoconductor layer is determined; and

using a temperature of the light source as a reference value for the temperature compensation of the light source.